

Supplemental Response to Office Action dated August 16, 2004
Serial No. 10/773,012; filed February 4, 2004
Inventor: Lutz
Art Unit: 3671
Page 2

Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Cancel claims 1-9.

10. (Previously Presented) A portable vibratory screed machine, comprising:

- (A) a screed blade;
- (B) a machine frame mounted on the screed blade;
- (C) an engine including a rotational output and an engine housing;
- (D) a vibratory assembly which is located remote from the engine and which

impacts vibrations to the screed blade;

(E) a drive shaft that transmits torque from the engine output to the vibratory assembly

(F) an engine mount that surrounds the drive shaft and that supports the engine on the machine frame;

(G) a reference structure that is at least indirectly supported on the screed blade; and

(H) a vibration restraint which is attached to the engine housing and which is attached to the reference structure at a location that is spaced from the engine mount thereby to restrain the engine from vibrating in a direction that is at least generally parallel to a central axis of the drive shaft.

{00073253.DOC /}

Supplemental Response to Office Action dated August 16, 2004
Serial No. 10/773,012; filed February 4, 2004
Inventor: Lutz
Art Unit: 3671
Page 3

11. (Previously Presented) The portable vibratory screed machine of claim 10, wherein the reference structure includes a mount plate of the machine frame on which the engine mount is supported, and wherein the restraint has a first end attached to the engine housing and a second end terminating in a flange that is configured to receive fasteners coupling the flange to the mount plate.

12. (Original) The portable vibratory screed machine of claim 11, wherein the restraint comprises a plate having first and second ends, the first end being directly coupled to the engine housing and the second end being directly coupled to the mount plate by the fasteners.

13. (Original) The portable vibratory screed machine of claim 12, wherein a portion of the plate is shaped to generally conform to a contour of a mating portion of the engine housing.

14. (Previously Presented) The portable vibratory screed machine of claim 13, wherein the restraint is configured to restrain vibration in a direction generally parallel to the central axis of the drive shaft independent of the engine mount.

15. (Original) The portable vibratory screed machine of claim 10, wherein, when the engine operates at a speed of 5,000 to 6,000 rpm, the vibration restraint is operable to at

(00073253.DOC /)

Supplemental Response to Office Action dated August 16, 2004
Serial No. 10/773,012; filed February 4, 2004
Inventor: Lutz
Art Unit: 3671
Page 4

least double an operational life of the engine relative to an engine of the same portable vibratory screed machine without a vibration restraint.

16. (Original) The portable vibratory screed machine of claim 15, wherein the vibration restraint is operable to quadruple a life of the engine.

17. (Original) The portable vibratory screed machine of claim 10, wherein, when the engine operates in a range of 5,000 to 6,000 rpm, the vibration restraint is operable to reduce engine vibration by at least forty percent.

18. (Original) The portable vibratory screed machine of claim 10, wherein, when the engine operates in a range of 5,000 to 6,000 rpm, the vibration restraint is operable to reduce engine vibration by at least twenty-five percent.

19. (Original) The portable vibratory screed machine of claim 10, wherein, when the engine operates in a range of 5,000 to 6,000 rpm, the vibration restraint is operable to extend a life of the engine to at least 200 operating hours.

20. (Original) The portable vibratory screed machine of claim 10, wherein the vibrating restraint comprises a metal plate having first portion and a second portion, the first portion being inclined relative to the second portion, and a flange coupled to the

{00073253.DOC /}

Supplemental Response to Office Action dated August 16, 2004
Serial No. 10/773,012; filed February 4, 2004
Inventor: Lutz
Art Unit: 3671
Page 5

second portion and having openings configured to receive fasteners coupling the flange to the reference structure.

21. (Previously Presented) A method of operating an engine of a vibratory plate machine, the vibratory plate machine having a screed blade, a machine frame mounted on the screed blade, a vibratory assembly, a drive shaft that couples the engine to the vibratory assembly, and an engine mount that surrounds the drive shaft and that supports the engine on the machine frame the method comprising:

operating the engine to drive the vibratory assembly to generate vibrations that are imparted to the screed blade; and, during engine operation,

restraining the engine relative to the vibratory assembly in a direction generally parallel to a central axis of the drive shaft using a restraint that couples the engine to a reference structure that is supported at least indirectly on the screed plate and that is spaced from the engine mount.

22. (Currently Amended) The method of claim 21, wherein the act of restraining includes reducing vibrational movement of the engine by at least 40 percent relative to operating the same portable vibratory machine without ~~perform~~performing the act of restraining.

{00073253.DOC /}

Supplemental Response to Office Action dated August 16, 2004
Serial No. 10/773,012; filed February 4, 2004
Inventor: Lutz
Art Unit: 3671
Page 6

23. (Original) The method of claim 21, wherein the act of restraining includes
providing a restraint having a first end and a second end,
coupling the first end of the restraint to the engine, and
coupling the second end of the restraint to the reference structure.
24. (Previously Presented) The portable vibratory screed machine of claim 10,
wherein the reference structure is part of the machine frame.
25. (Previously Presented) The portable vibratory screed machine of claim 24,
further comprising a handle assembly that is mounted on the machine frame.
26. (Previously Presented) The method of claim 21, wherein the reference structure
is part of the machine frame.
27. (Previously Presented) The method of claim 26, further comprising guiding the
portable screed assembly using a handle assembly mounted on the machine frame.
28. (Previously Presented) A portable vibratory screed machine, comprising:
- (A) a screed blade;
 - (B) a machine frame mounted on the screed blade;
 - (C) an engine including a rotational output and an engine housing;

{00073253.DOC /}

Supplemental Response to Office Action dated August 16, 2004
Serial No. 10/773,012; filed February 4, 2004
Inventor: Lutz
Art Unit: 3671
Page 7

- (D) a vibratory assembly located remote from the engine;
- (E) an at least generally vertically extending drive shaft that transmits torque from the engine output to the vibratory assembly;
- (F) an at least generally vertically extending engine mount that surrounds the drive shaft, that extends upwardly from the machine frame, and to which the engine is clamped;
- (G) a reference structure provided on the machine frame and that is spaced from a base of the engine mount; and
- (H) a vibration restraint that is attached to the engine housing and to the reference structure at a location that is spaced from the engine mount thereby to restrain the engine from vibrating in a direction that is at least generally parallel to a central axis of the drive shaft.

{00073253.DOC /}